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# Effects of differentiated instruction on students' attitudes towards Turkish courses: an action research<sup>a</sup>

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#### Abstract

The aim of this study is to determine the effects of differentiated instruction approach on students' attitudes in Turkish course. The study was carried out through an action research approach and conducted with the 5th grade students in Turkey. Data of the study were collected through Turkish Course Attitude Scale and semi-structured interviews. The qualitative data collected were analyzed through "NVivo 8" program, and the quantitative data were analyzed with SPSS program. The results of this study revealed that differentiated instruction approach influenced the students' attitudes toward Turkish course positively. © 2010 Published by Elsevier Ltd.

Keywords: Primary education, Turkish course, differentiated instruction

#### 1. Introduction

The quality of language education given at elementary school is influential on the individuals' adaptation to social and cultural environments and effective communication. A qualified language education requires taking the students' individual differences, interest and skills into account. One of the important areas that the individuals show differences is language acquisition which is individual. The idea of single method, understanding and activity is not approved in acquiring language processes since the individuals come with their different knowledge and experience to the learning environment (Akyol, 2006, p.i; Chun & Plass, 1997, p. 67). In this context, the teachers are required to provide learning opportunities with all students in class, create suitable education settings to students, design teaching activities, get aware of the most effective method required for teaching, and apply different teaching approaches in teaching process (Cox, 2008, p.52; Levy, 2008, p.162; McKenzie, 2007, p.3; Subban, 2006; Farris, 2005, p. 58; Adami, 2004, p.91; NMSA, 2003, p.1; Theisen, 2002, p.1; Robertson, 1998, p.31). The differentiated instruction is one of the approaches that provides a teaching opportunity appropriate for the students' differences and considers these differences.

The differentiated instruction is a kind of teaching approach based on the understanding that students have individual differences in terms of learning interests, skills, learning styles and learning needs (Anderson, 2007, p.50;

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Coyne, Kaméenui & Simmons, 2004, p.234; Chapman & King, 2003, p 2; Tomlinson, 1999, p.2). In order to respond to the learning needs of students with different skills, the content, process and product are adapted according to students' various interest and readiness level (Powers, 2008, s.57; Tomlinson, 2001). The differentiated instruction is an approach which is forward-looking, quantitative rather qualitative, based on evaluation, multi-dimensional for the content, process and product, student-centered, and mixture of large, small group and individual teaching (Tomlinson, 2001, p.2-5).

The studies revealed that the differentiated instruction approach is successful particularly in reading-writing teaching and mathematics and biology (Chen, 2007, p.9). Additionally, the differentiated instruction approach is defined as an effective approach in development of language skills and recommended to be used (Tobin and McInnes, 2008, p.3). In the class where this approach is applied, students develop their reading and comprehension skills appropriate for their own learning features (Chapman and King, 2003, p.30). In the present study, within the context of differentiated instruction approach, centers strategy was used to evaluate the applicability of this strategy to enable students' active participation in learning process and studying in small groups individually or in pairs at Turkish course.

In literature, it is stated that the differentiated instruction approach has important effect on student success; however, there is a gap between the applicability and effectiveness of this approach and thus there is a need for further action researches to examine this issue (Anderson, 2007, p.52; Subban, 2006; Tomlinson & Allan, 2000). Although the differentiated instruction has been emphasized as effective in increasing students' success and motivation by enabling their active participation to learning process and in decreasing discipline events, there are no scientific applications or studies on this issue in Turkey. Therefore, there is a need for this study that would examine the effect of the differentiated instruction approach at Turkish course on students' attitudes towards Turkish course.

The aim of this study was to determine the effect of the differentiated instruction approach on the students' attitudes towards Turkish course. In line with this aim, the following research question was addressed: Does the differentiated instruction approach cause any changes on the students' attitudes towards Turkish course?

# 2. Methodology

The study was designed as an action research, which involves revealing the problems related to application process or systematical data collection and analysis to understand and solve present problem (Yıldırım & Şimşek, 2005, p.295).

## 2.1. Participants

Out of purposeful sampling methods, criterion sampling method was used in the study. While selecting the participants, having 5th year students was determined as the fundamental criterion. The reason for such a choice was the students at this age was able to understand and fulfill the instructions given by the teacher and use the activities determined at certain centers independently and actively. 16 girls and 14 boys, totally 30 students participated in the study.

## 2.2. Data Collection Process

The study started on 18.02.2009 and ended on 05.06.2009. The application process of the study was carried out at Turkish courses. During the application, action plans was made to perform Turkish lessons according to the centers strategies of the differentiated instruction approach and lesson activities were arranged and applied in accordance to these plans. The researchers presented macro analysis of the data obtained as a result of the applications of these action plans in this action research to the instructors in the validity committee. In the validity committee meetings, the problems encountered during the application, the solutions to the problems, and the good and bad points of the lessons were discussed and related decisions were made. The researchers made new action plans according to the decision of the validity committee.

#### 2.3 Data Collection Tools

In the study, an attitude scale was used at the beginning and end to determine what kind of changes the differentiated instruction may cause on the students' attitudes. This scale was "Attitude Scale related to Turkish Course" developed by Acat (2000) and applied to 70 students for validity and reliability, with 0.81Cronbach alpha coefficient. The permission to use this scale was taken by the researchers. When the scale was applied to the sampling group, for pretest, Cronbach alpha coefficient was found 0.88; while for post test, it was 0.89. As a result of calculations, it could be claimed that the attitude scale used in the study to examine the effect of the differentiated instruction approach on the students' attitudes towards Turkish course was reliable. Another data collection technique of the study was "semi-structured interview". Semi-structured interviews were carried out with the students and class teacher before and after the applications. By this way, it was attempted to determine the participants' opinions and beliefs about Turkish course.

## 2.4. Data Analysis

The data collected through the attitude scale was analyzed with SPSS (Statistical Package for The Social Sciences) package program and interpreted. In data analysis, the mean and standard deviation of the students' pre and post test scores were calculated. Besides, in order to address the research problems, comparisons within groups were carried out through t-test. On the other hand, for the analysis of semi-structured interviews, "NVivo8", which is one of the qualitative analysis programs, was used.

### 3. Findings

To determine the effect of the differentiated instruction approach on the students' attitudes toward Turkish course, the students' attitude levels towards Turkish course were examined and then the significance of the differences between the attitude levels were tested. To determine the students' attitude levels, the mean and Standard deviation values of the pre and post tests were calculated. In order to check whether the differences between the pre and post tests were significant or not, t test was employed and the obtained findings were presented in Table 1.

N X Ss Sd t p
Pre- attitude 30 83.76 14.75 29 -4.407 0.000\*
Post attitude 30 89.80 12.51

Table 1. T-test Results for Attitude Scale

t table: 2.045

When the pre and post tests on the students' attitudes towards Turkish course were compared, it was observed that the post test results about the attitudes towards Turkish course (89.80) were higher than the pre-test results (83.76). To check whether the difference between the pre and post test results (06.04) was significant or not, t-test was applied and t value was found 4.407. This value was quite above 2.405 table value at .05 significance level with 29 degree of freedom. Not only this result but also semi-structured interviews indicated that the differentiated instruction approach influenced the students' attitudes towards Turkish course positively.

In detail, the students reported that the centers that were applied within the differentiated instruction approach were more entertaining and pleasant than other courses and activities. Moreover the activities applied according to this strategy were more informative and instructive, and through these activities, they started to like Turkish courses more. About this issue, Erkan and Sinan explained their opinions as follows:

"When compared with other activities, these activities are better and more entertaining than the ones in other courses. Additionally, in fact these activities were compatible with Turkish course. They were more entertaining and better than our previous Turkish course (...) I started to love Turkish course more. Because I have learned a lot of things at Turkish course (Erkan, 05.06.2009, st.2783-2785; 2787).

"Nice activities. Informative ones. I got fun at all centers of the teacher. Even my reading speed up at the texts I have already read. I liked Turkish course. I started to like more (...) Before this, I sometimes got bored at Turkish

course. I was waiting for the break impatiently. Now I do not care. In fact, I like the lesson. I realized that I began to learn" (Sinan, 17.04.2009, st. 2801-2802; 2838-2840).

At the semi-structured interviews carried out at the end of the application, Sinan repeated the increase in his positive feelings and opinions towards Turkish course and emphasized that the activities in this approach increased the success at Turkish course. Furthermore, during the interviews, it was often emphasized that the center activities carried out within the context of the differentiated instruction approach were different from the previous language activities and the center activities contributed to students to get higher grades. Besides, these activities influenced the students' attitudes towards other courses positively. Regarding this, Zeynep said as follows:

"Previously, in fact I got a bit bored before the activities. But once we started to do these activities, I started to have more fun. It became more entertaining. There are also some boring activities at workbook, but here is more enjoyable. I wish Turkish course were always like this (....) In fact, we have not do anything like this. This way was more enjoyable, I learnt better, I did understand. It was much amusing (...) Indeed, after I did these activities, I oth liked Turkish course and got better grades (16.04.2009, st. 1262-1266; 1334-1335; 1381-1383; 1394-1397).

Moreover, the student; Gizem stated the changes in her feelings about Turkish course and explained that her interests in Turkish course and desires to read and write increased. Additionally she attracted attention that the activities carried out at centers influenced her successes at other courses positively and in this context, the center strategy within the differentiated instruction approach enhanced her learning skills interdisciplinary and her motivation increased. She explained her opinions as follows:

"What we learn at Turkish courses usually helps us at Social Sciences course. Recently when we have come to the board for the presentation at Social Sciences course, using the speaking techniques we have learnt at Turkish course, I have recently made very effective presentations. Related to writing, I can write more accurately and orderly on my notebook at all courses. In reading, I can read more fluently and clearly. I mean, these activities helped me a lot develop myself at all courses" (Gizem, 04.06.2009, st.2334-2341).

#### 4. Discussion and Recommendations

It was revealed that the differentiated instruction approach had positive effects on the students' interest and attitudes. In literature, the differentiated instruction is quite effective on enhancing the students' interests and attitudes towards the lessons. It was found out that the students' academic success interest in the lesson, learning levels and their participation to the lesson were enhanced in the class in which the differentiated instruction application was carried out. (Baumgartner et al, 2003; Beecher & Sweeny, 2008; Fahey, 2000).

Related to this, the findings of the study were parallel with the findings of Avcı, Yüksel, Soyer and Balıkçıoğlu's (2009) study, which concluded that the differentiated instruction increased the students' interest in the lessons. Moreover, it coincides with Chen's (2007) finding that the students had positive attitudes towards the lesson. Likewise, McAdamis's (2001) finding that "the differentiated instruction increased the students' motivation and interests in the lesson showed similarities with the findings of the study. Moreover, according to Burn's study, the teachers considered that the differentiated instruction increased the students' interests and participations to the lesson and thus it provided the students' interaction and provided opportunities with the students to learn at their own speed. This finding also coincides with the finding of the study. In addition to the studies explaining that the differentiated instruction increases the students' interest in the lesson (Tieso, 2005, 2001; Fahey, 2001; McAdamis, 2001). The finding of the research that the teachers are also willing to do flexible grouping based on the differentiated instruction and that they have positive attitudes (Haghighat, 2009) coincides with the finding of the study.

Based on the results of the study, the following recommendations can be put forward:

- Qualitative and quantitative studies can be conducted at different lessons and classes to examine the effect of the differentiated instruction on the students' attitudes.
- In this study which examined the effects of the differentiated instruction approach on the students' attitudes towards Turkish course, the centers strategy was used. In further studies, different strategies and methods can be used within the differentiated instruction approach.

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